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Abstract

PURPOSE: To enable easy atomic layer control and to reduce a supply amount which is necessary for crystal growth by supplying a specific metallic atom on a formation substrate and by supplying molecule having self-formation stopping mechanism on the formation substrate.

CONSTITUTION: Group III or II metal is supplied onto a formation substrate at a base of one layer or less. Molecule having self-formation stopping mechanism containing group III or II element is supplied. Monoatomic layer formation of group III or II element is thereby finished. A reaction container 10 for containing a formation substrate 9 of the device is provided with a first introduction piping for introducing a first raw material to a reaction pipe 10 and a second introduction piping for introducing a second raw material to a reaction pipe. The second introduction piping is made to diverge into a first divergent introduction piping and a second divergent introduction piping. The first divergent introduction piping is introduced to the reaction container as is and the second divergent introduction piping is introduced to a reaction container through a heating device 4 for thermal decomposition of organic metal raw gas.